

ABSTRACT

A diverting system for displacing articles from a conveying surface including a diverter blade adapted to be rotated about a rotary axis from a retracted position along the edge of the conveying surface to an extended position to displace the articles, the diverter blade having a pusher surface spaced apart from the rotary axis by a connecting portion of the blade. A section of the connecting portion located immediately downstream of the rotary axis extends away from the edge in the blade's retracted position to form a void, so that when the blade is in an extended position for diverting a leading (downstream) article, the presence of the void prevents contact between the diverter blade and a trailing (upstream) article. The trailing article can travel downstream past the axis even while the blade is in the extended position. Thus, the trailing article can be positioned closer to the leading article without risk of contacting the blade, thereby increasing the throughput of the system. The connecting portion can be freely pivotably connected to a section of the blade on which the pusher surface is disposed, with a shock absorber provided in order to soften impacts imparted to the articles by the pusher surface.